

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application.

**COMPLETE LISTING OF THE CLAIMS:**

Claims 1-15 : (Canceled)

Claim 16 : (New) A telecommunications network, comprising:  
a plurality of mesh nodes, each mesh node including a switch, each mesh node having a connection to each other mesh node by means of a connection between a switch at one of the mesh nodes and a switch at another of the mesh nodes, at least one further mesh node including a plurality of switches having connections configured such that a connection from another mesh node is only connected to one of the switches associated with the at least one further mesh node, and each mesh node having associated therewith a respective plurality of local nodes, each switch of each mesh node being connected to all of its respective associated plurality of local nodes, and a network routing algorithm to control routing in the network.

Claim 17 : (New) The telecommunications network as claimed in claim 16, wherein one or more of the local nodes are connected to more than the one mesh node.

Claim 18 : (New) The telecommunications network as claimed in claim 16, wherein the plurality of switches of the mesh node are connected.

Claim 19 : (New) A method of upgrading a telecommunications network having a plurality of mesh nodes, each mesh node including a switch, each mesh node having a direct connection to each other mesh node by means of a connection between a switch at one of the mesh nodes and a switch at another of the mesh nodes, and each switch of each mesh node being each connected to all of its respective plurality of multiple local nodes, the method comprising the steps of:

- a) adding switches to at least one further mesh node;
- b) connecting all of the respective plurality of local nodes to the switches of the at least one further mesh node;
- c) providing a network routing algorithm to control routing in the network; and
- d) configuring each connection of the switches for the at least one further mesh node such that a connection from another mesh node is only connected to one of the switches associated with the at least one further mesh node.

Claim 20 : (New) The method of upgrading the telecommunications network as claimed in claim 19, further including the step of making a connection between the switches of the at least one further mesh node.